

## SMA (M) to SMA (M) Coaxial Cable, Semi-Rigid, 24"

### Description:

**Model SCW-SMSM024-S1** is a 24" long, semi-rigid coaxial cable with SMA male connectors that cover the frequency range of DC to 26.5 GHz. The coaxial cable utilizes high performance material and a precision manufacturing process to guarantee superior microwave performance and mechanical durability. The impedance of the cable is 50 ohms. Other lengths are offered under different models.



### Features:

- High Return Loss
- Low Insertion Loss
- Semi-Rigid

### Applications:

- Test Lab
- Sub-assemblies
- System Integration

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	DC		26.5 GHz
Insertion Loss @ 3 GHz		0.8 dB	
Insertion Loss @ 6 GHz		1.2 dB	
Insertion Loss @ 12 GHz		1.8 dB	
Insertion Loss @ 18 GHz		2.2 dB	
Insertion Loss @ 26.5 GHz		2.9 dB	
Return Loss @ 26.5 GHz		17 dB	
Impedance		50 $\Omega$	
Breakdown Voltage			500 V
Radiation Shielding		120 dB	
Velocity Factor		70%	
Power Handling @ 26.5 GHz			30 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

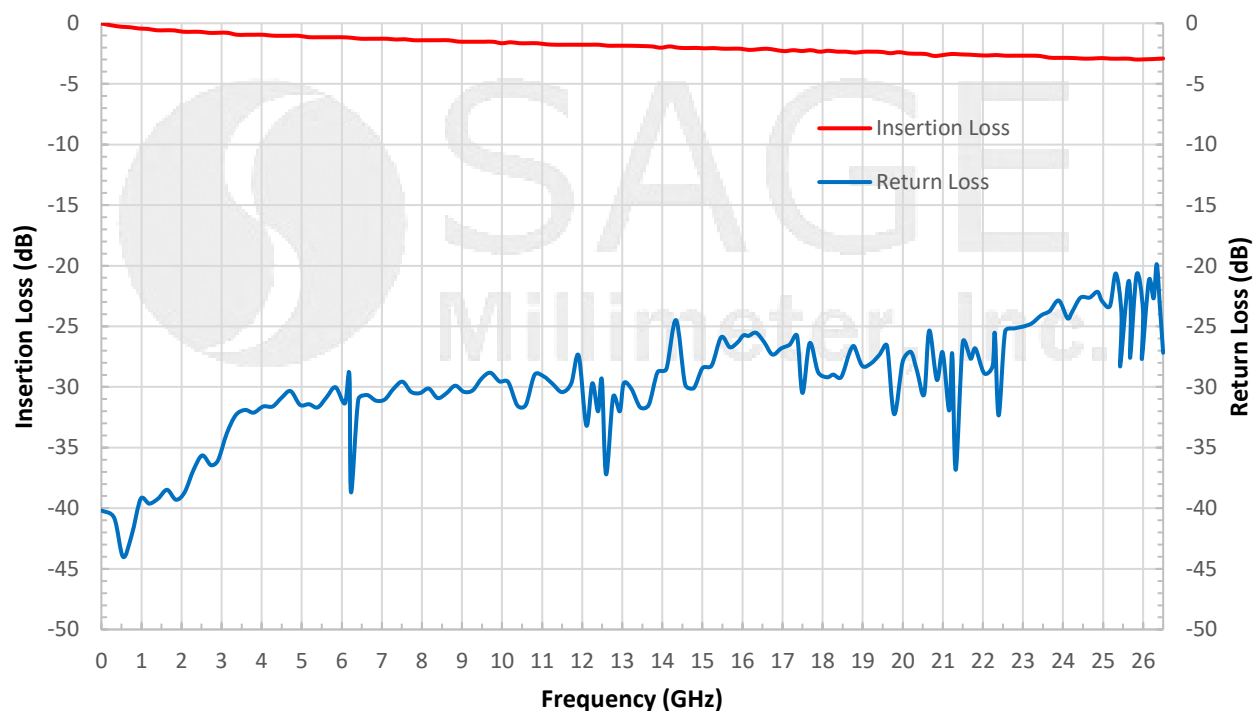
### Mechanical Specifications:

Item	Specification
Minimum Bending Radius	0.126"
Connectors	SMA Male
Connector Material	Passivated Stainless Steel
Cable Conductor	Brass, Gold Plated
Cable Insulators	PTFE
Cable Outer Diameter	0.087"
Length	24"
Weight	0.6 Oz
Outline	CW-SS-S8

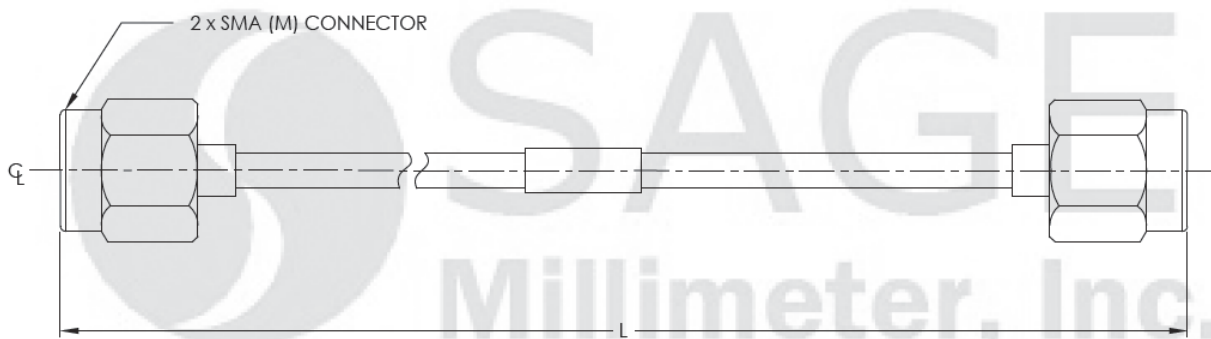


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## Typical Insertion Loss &amp; Return Loss vs. Frequency



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches)

**Note:**

- Length "L" can be customizable.
- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

**Caution:**

- Bending the cable sharply will either cause damage or degrade the performance of the cable.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-U3, is highly recommended.**

